Environmental security in the Middle East and North Africa: approaches, policy patterns, and activism trends
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INTRODUCTION

Environmental security is an elusive concept, although it has increasingly entered the academic, popular and policy lexicon. It is associated with different meanings, and therefore encompasses multiple referent objects, sources of risk and scales of concern. The Middle East and North Africa (MENA) region is no exception. Indeed, it is an emblematic case of some of the main trends in the approach to environmental security, especially in its association with violent conflicts and threats to national security, even though the concept was born as part of wider efforts to expand the breadth of security beyond its militaristic and state-centric connotations which occurred during the 1980s and were further consolidated in the post-Cold War era. This chapter provides a preliminary overview of the major interpretations of environmental security in MENA. Far from being exhaustive coverage, it is intended as an initial step towards bridging comparative politics and area studies, to emphasize the importance of better investigating the phenomenon and its facets from a wider perspective, by drawing on broader theoretical debates and the phenomenon's problematization and evolution in different contexts without forgetting concrete cases on the ground. This is even more relevant since environmental questions are no longer a marginal topic in Middle East politics,[2] and are becoming extremely diversified.

This chapter proceeds as follows. It first draws on the genesis and evolution of the concept of environmental security, and then addresses the lines of continuity and discontinuity of how the MENA fits into this theoretical framework. Second, it looks at how the idea of environmental security in the region is articulated in policy terms with a top-down focus, especially in the over-emphasis on green transitions that alone have captured the debate. Third, moving to a bottom-up perspective, the chapter looks at the environmental priorities for Arab citizens and how they stand in relation to other pressing concerns. It concludes with a reflection on environmental activism regionwide, understood as a way of renegotiating rights and re-appropriating public spaces, but also as evidence of the persistence of a substantial disconnect between needs from below and responses from above. The latter is, in short, the main argument of the chapter. More than an argument, to be fair, it is a hypothesis that needs further investigation, especially in comparative terms. The chapter posits, however, the importance of looking at the

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[2]   Jeannie Sowers and Marc Lynch, Introduction to *Environmental Politics in the Middle East and North Africa* (Washington, DC: POMEPS, 2022).

environment as another arena for negotiation and renegotiation of faltering social contracts that it is very difficult, if not impossible, to disconnect from closely interrelated issues of social justice, state–society relations and forms of knowledge production. In this sense, the reference to the idea of security, with all the ambiguities but also the possibilities it offers, is a fundamental lens precisely to better focus on the contradictions inherent in the relations between the peoples and states in MENA and the environment.

ORIGINS AND MAJOR INTERPRETATIONS OF ENVIRONMENTAL SECURITY

Since the 1960s, environmental security has gradually emerged as an important concept in security studies, alongside the growth of environmental consciousness and movements and environmental non-governmental organizations.[3] However, from the 1970s onwards a major twist in the literature has been seen, also going hand in hand with international summits on environmental issues and the proliferation of international environmental conventions, from marine pollution to waste, from endangered species of wild fauna and flora to biological diversity, and much more. The progenitor event of the United Nations Conference on the Human Environment held in Stockholm in 1972 in fact inaugurated a number of meetings, multilateral agreements and reports which 'popularized' terms such as 'sustainable development'.[4] The publication of the 1987 report of the World Commission on Environment and Development, entitled *Our common future*, introduced the notion of 'environmental security', which powerfully entered international debates.[5] Notably, this influential report incorporated the perspective that situations of scarce resources, such as food shortages, water scarcity and fisheries depletion, as well as environmental disruption (climate change and deforestation, to name just a few), were very likely to induce violent conflict. Such a theorization links back to Norman Myers,[6] one of the first academics to address what we may label the 'conflict-environment thesis', which still has a large following today, as the chapter will explore in more detail below. At that time, however, early scholarly attempts to challenge from an environmental standpoint the orthodox meaning and practices of security – built around state-centric and mil-itary approaches – laid the foundations for ideas such as environmental interdependence and common security, binding together environmental threats, international stability and national well-being.[7] In so doing, they emphasized that there were common problems that required collective action. Just like migration, the environment has therefore become increasingly seen through the lens of security. As Peoples and Vaughan-Williams recall by borrowing the language of the Copenhagen School, the environment has been gradually securitized in

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[3] Jon Barnett and Geoff Dabelko, 'Environmental Security'. In *Contemporary Security Studies*, ed. Allan Collins (Oxford and New York: Oxford University Press, 2019).

[4] Barnett and Dabelko, 'Environmental Security'.

[5] Barnett and Dabelko, 'Environmental Security'. Maria J. Trombetta, 'Environmental Security and Climate Change: Analysing the Discourse', *Cambridge Review of International Affairs* 21 (2008).

[6] Norman Myers, 'The Environmental Dimension to Security Issues', *Environmentalists* 6 (1986).

[7] Robert Falk, *This Endangered Planet: Prospects and Proposals for Human Survival* (New York: Random House, 1971); Harold Sprout and Margaret Sprout, *Toward a Politics of Planet Heart* (New York: Van Nostrand Reinhold Company, 1971).

public policy, academic context and media.[8] In this sense, it has been increasingly politi- cized, namely, turned into a matter of 'high' politics just like more orthodox security threats. Nonetheless, although the debate had been long in the making and environmental security gained momentum in the 1980s – not by chance, given the emerging, pressing concerns of global warming and ozone depletion – it was mainly in the early 1990s, with the end of the Cold War, that the intellectual and policy space was created for environmental security to become a full-fledged part of the new 'security' agendas.[9] Issues such as environmental degra- dation and water scarcity above all were increasingly incorporated into security concerns, and national security strategies.[10]

The securitization (and politicization) of the environment is part of a paradigmatic shift in understanding security as highlighted by so-called critical security studies. This sub-discipline is bound up with the 'broadening' and 'deepening' of the concept, whereby the former refers to the expansion to sectors other than the military and the latter to the inclusion of other entities to be secured (referent object) beyond the state.[11] From this standpoint, broadening security implies that the threats are no longer only military in nature but also economic, societal, polit- ical and environmental, in the classical five-dimensional approach first introduced by Barry Buzan in *People, States and Fear*.[12] Also, deepening the notion of security means that threats are not only against the state but also below and above it, that is, also against individuals, groups and even the biosphere.

As the study of security broadened and deepened away from solely state-centric militaristic concerns of the Cold War era, a number of interpretations of environmental security have emerged based on the ambiguity of the definition of both the concepts of 'environment' and 'security'. Barnett and Dabelko,[13] for example, delineate at least six major understandings of environmental security, differing on the basis of the entity to be secured (from the natural environment to the nation state, from the armed forces to individuals), the source of risk to that entity (ranging from human activity to environmental change, from war to green groups) and the scale of concern and solutions proposed. What is sometimes called 'ecological security', for example, focuses on the impacts of human activities on the environment, thus treating the former as the main source of threat and the latter as the entity at risk.[14] By contrast, according to other approaches, which focus either on common security or national security with the nation state as a referent object, or on human security with individuals at the centre, it is environmental problems such climate change that threaten countries or peoples. Remarkably, most interpretations do not radically differ from mainstream security thought and practice, inasmuch as they focus on the nation state with a more or less explicit risk of armed conflict.

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[8] Columba Peoples and Nick Vaughan-Williams, 'Environmental Security'. In *Critical Security Studies: An Introdcution*, eds C. Peoples and N. Vaughan-Williams (Abingdon and New York: Routledge, 2010).

[9] Simon Dalby, 'Ecopolitical Discourse: "Environmental Security" and Political Geography', *Progress in Human Geography* 16 (1992).

[10] Peoples and Vaughan-Williams, 'Environmental Security'.

[11] Ibid.

[12] Barry Buzan, *People, States and Fear: An Agenda for International Security in the Post-Cold War Era* (London: Harvester Wheatsheaf, 1991).

[13] Barnett and Dabelko, 'Environmental Security'.

[14] Barnett and Dabelko, 'Environmental Security', 240.

For the purpose of this chapter, two considerations are relevant here. First is the connection between environmental change and violent conflict, which has been a long-standing, central concern of security studies dealing with the environment. A second consideration is as obvious as it is, paradoxically, often underestimated: 'no two countries have exactly the same interests'[15] and all differ in the extent to which they can or want to deal with 'common' problems.

The Middle East and North Africa region is a case in point in both of these respects, as treated in greater depth in the following two sections.

THE ENVIRONMENT–CONFLICT NEXUS AND THE MENA

With regard to the first dimension outlined above, Youness points to a substantial overlap between conventional security threats of military nature centred on nations and 'unconventional' security threats of environmental nature focusing on societies and individuals.[16] Building on John Waterbury's 2013 study on *The Political Economy of Climate Change in the Arab Region*,[17] he argues that climate change brings along new threats to human and international security as well as to states in the shape of internal conflict, terrorism and instability, as evidenced by the examples of Syria and Darfur. The displacement of inhabitants from one area to another due to droughts and desertification contributed to the outbreak of conflict, as well as the expansion of terrorist organizations.[18] The argument of conflicts over resources as a consequence of climate change, embedded in an ontology typical of the Realist school, is neither new nor exclusive to the Middle East and North Africa region where it is very praised and criticized at the same time. Discussions about environmentally induced conflicts go back to the beginnings of the broader theoretical debate on alternative security logics and the implications of securitizing the environment.

In *The Coming Anarchy*, Robert Kaplan proclaimed the environment 'the national-security issue of the early twenty-first century'.[19] In Myers's footsteps, he reiterates the link between environmental disruption and violent outcomes by stressing how population growth has exacerbated issues such as diseases, conflicts and instability coming from environmental changes. If such problems were then confined to the 'global south', he posited, they would soon spread to the 'civilization' of the 'global north' in a sort of snowball effect. In a similar vein, Michael Klare's *Resource Wars*[20] argue that resource scarcity and increased population account for ethnic, religious and tribal violence whereas states' security ultimately depends on their resource supplies. This argument clearly fits into the Realist tradition of strategic studies – the classic, mainstream approach to security in international relations. The alarmist and sensationalist tone of studies on environmentally induced conflicts gained momentum and almost 'captured' the debate. Many, however, challenged the core argument that ecological decay is

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15   Ibid., 241.
16   Mohamed A. Youness, comment on World Bank, 'How Climate Change Contributed to the Conflicts in the Middle East and North Africa', *World Bank Blogs*, 10 December 2015, https://blogs.worldbank.org/arabvoices/climate-change-conflict-mena.
17   John Waterbury, *The Political Economy of Climate Change in the Arab Region* (UNDP, 2013).
18   Youness, 'How Climate Change Contributed'.
19   Robert Kaplan, 'The Coming Anarchy', *Atlantic Monthly* 273 (1994).
20   Michael T. Klare, *Resource Wars: The New Landscape of Global Conflict* (New York: Henry Holt, 2002).

likely to cause inter-state conflicts, and criticized it as to its empirical validity and analytical relevance, and on normative grounds.

Thomas Homer-Dixon's seminal critique of the environment–conflict thesis largely shaped the debate at the time.[21] He warned that the causal link between environmental scarcity and degradation (as independent variables) and violent conflict (as a dependent variable) is not straightforward. Although environmental problems may be associated with it, he pointed out, they are neither a necessary nor a sufficient cause. To sum up, Homer-Dixon argued that there is no empirical evidence that scarcity is a major cause for wars among states; rather, environmental factors are more indirect causes as they prompt, for instance, internal migration, or inter-ethnic conflict. Likewise, Trombetta recalls that the debate about environmentally induced conflict has evolved to the extent that 'research suggests that conflicts are likely to be subnational and low intensity', that is they tend to be localized instead of unfolding as violence opposing developed and developing countries.[22] Moreover, to name but a few examples, she also recalls that not only have some studies demonstrated that environmental degradation often provides an opportunity for cooperation, but also that it is resource abundance rather than scarcity that determines conflicts.[23] Zooming in on the MENA scholarship, particularly indicative is the joint work edited by Werrell and Femia that investigates the links between the Arab uprisings and climate change.[24] While identifying a series of correlations, the authorswarn against considering climate change as a direct cause of the uprisings. Instead, it would act more properly as a 'threat multiplier'[25] and 'stressor.'[26] Likewise, Daoudy is careful in resorting to simplistic linkages.[27]

Securitizing the environment comes with a set of consequences and implications.

First, as a result of framing environmental issues in terms of violence and conflict by mimicking the logic of the Realist school, environmental factors are understood as multi-level security threats, first and foremost to the nation state (national security), and also to individuals (human security). From an analytical point of view, however, Deudney highlights substantial differences between traditional, military and environmental threats, in terms of their nature, jurisdiction and responses to be dealt with.[28] The former are in fact a threat to national security as such, are intentional behaviours and necessitate the response of 'secretive, extremely hierarchical, and centralized' organizations;[29] the latter unfold beyond state sovereignty, are largely

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[21] Thomas Homer-Dixon, *Environment, Scarcity, and Violence* (Princeton and Oxford: Princeton University Press, 1999).

[22] Trombetta, 'Environmental Security and Climate Change', 592.

[23] Ibid.

[24] Caitlin E. Werrell and Francesco Femia, eds., *The Arab Spring and Climate Change. A Climate and Security Correlations Series* (Washington, DC: Center for American Progress, Stimson and The Center for Climate and Security, 2013).

[25] Ibid.

[26] Anne-Marie Slaughter, Preface to *The Arab Spring and Climate Change. A Climate and Security Correlations Series* (Washington, DC: Center for American Progress, Stimson and The Center for Climate and Security, 2013).

[27] Marwa Daoudy, *The Origins of the Syrian Conflict: Climate Change and Human Security* (Cambridge: Cambridge University Press, 2020).

[28] Daniel Deudney, 'Environmental Security: A Critique', in *Contested Grounds: Security and Conflict in the New Environmental Politics*, ed. Daniel Deudney and Richard Mathews (Albany: SUNYPress, 1999).

[29] Deudney, 'Environmental Security', 193–4.

unintentional harming activities and call for global, collective action. That is why Deudney is sceptical about the securitization of the environment.

Second, and also challenging the empirical and analytical validity of the claims of the environment–security nexus as set out by the conflict thesis, some also criticize the normative implications of such an approach. In particular, scholars such as Barnett[30] and Dalby[31] draw attention to the imagery it outlines, and how this approach glosses over relevant ethical and political issues (such as colonial histories) which reproduce structural inequalities in the distribution of resources globally. In a way, by pointing to environment-related risks coming from the 'Global South' or the 'Third World', this narrative reproduces stereotypical images of 'Others' associated with barbarism and violence.[32] Not least, it acts as a way to erase the responsibility of developed countries.[33] Zooming in on the Middle East and North Africa, these considerations are very pertinent. Hoffmann has recently highlighted a sort of 'environmental oriental determinism' when it comes to discussing the political ecology of the MENA region, portrayed as 'fragile, alien and hostile'.[34] In other words, an orientalist legacy remains which overstates that scarce nature is deterministically mismanaged by societies and states that are overall incapable of negotiating modernity inputs.[35] With these premises, old colonial tropes reactivate, to the extent that environmental degradation and arid wilderness is attributed to indigenous activities and can be remedied by foreign expertise so as to justify colonial enterprises.[36] In this way, (neo)colonial interventions are legitimized in a new form, through mega-development projects such as avant-garde solar power plants following a vision of progress and development, without even considering trade-offs for local communities.[37] Over the past decade, in fact, an increasing number of scholars of MENA (or, more appropriately, South West Asian/ North African) politics have been engaging with issues of environmental exploitation, especially in 'peripheral' territories,[38] as byproducts of neoliberal, state-led and international donor-driven policies, and as the manifestation of neocolonial practices. Therefore, securitizing the environment, even more so in connection of a sort of environmental orientalism, is by no means neutral in terms of knowledge production.

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[30] Michael Barnett, *The Meaning of Environmental Security: Ecological Politics and Policy in the New Security Era* (London and New York: Zed Books, 2001).

[31] Simon Dalby, *Environmental Security* (Minneapolis and London: University of Minnesota Press, 2002).

[32] See also Trombetta, 'Environmental Security and Climate Change' on this point.

[33] Trombetta, 'Environmental Security and Climate Change'.

[34] Clemens Hoffmann, 'Environmental Determinism as Orientalism: The Geo-political Ecology of Crisis in the Middle East', *Journal of Historical Sociology* 31 (2018).

[35] Hoffmann, 'Environmental Determinism as Orientalism'.

[36] Diana K. Davis, *The Arid Lands: History, Power, Knowledge* (Cambridge, MA: The MIT Press, 2015); Diana K. Davis, and Edmund Burke, eds, *Environmental Imaginaries of the Middle East and North Africa* (Athens: Ohio University Press, 2011).

[37] Khaoula Bengezi, 'New Constructions of Environmental Orientalism: Climate Change Mitigation Solar Power Projects in the Sahara Desert', in *Environmental Politics in the Middle East and North Africa*. POMEPS Studies 46, May 2022.

[38] Ángela Suárez Collado, 'The Amazigh Movement in Morocco: New Generations, New References of Mobilization and New Forms of Opposition', *Middle East Journal of Culture and Communication* 6 (2013); Brecht De Smet and Soraya El Kahlaoui, 'Putting the Margins at the Centre: At the Edges of Protest in Morocco and Egypt,' *Partecipazione e Conflitto* 14 (2021).

Last, and beyond these criticisms, however, some have also emphasized the positive aspects of the environment–security nexus, whether we consider environmental factors as objective threats from a Realist perspective or as socially constructed threats according to a constructivist reading and the securitization approach of the Copenhagen School. Indeed, while framing environmental issues in the more familiar language of threats to national security captured a broader debate and reduced the breadth of innovation, it also had the effect – difficult to say how intentional – of legitimizing environmental discourse[39] by drawing states' attention to problems that would otherwise be left unaddressed.[40] In other words, securitizing the environment raised its profile.

A POLICY APPROACH TO ENVIRONMENTAL SECURITY: WHAT GREEN TRANSITIONS?

Moving from the theoretical and conceptual level to practices on the ground, another key dimension to consider here is the variety of interests and actions at stake resulting in heterogeneity on the public policy front. Environmental initiatives at the regional level remain fragmented, not unlike other regional initiatives of regional cooperation. Competing and different conceptions of existing and emerging threats, inter-Arab rivalries fuelling enmity and mistrust, and a narrow conception of militaristic security are held responsible for failuresin developing a working collective security scheme.[41] In a way, these obstacles to regional integration have marked a weak 'security complex', to borrow Buzan and Waever's notorious definition.[42] If this is true in general terms when it comes to security, most often understood in traditional terms, the same applies to environmental security. We are not saying anything new when we remember that, even in the context of an interdependent world, the global or regional scale of concern about environmental issues – climate change above all – does not mean that all countries are equally responsible for them or equally at risk from them. Moreover, just as it is true that environmental issues transcend state boundaries, especially those related to climate change, it is equally reasonable to say that some are much more localized, and related to issues of (bad) governance and resource redistribution (for example, waste management and overexploitation of lands and water for intensive export crops that cause structural resource deficits for local populations).

It is inevitable, therefore, that when talking about environment and security, we are confronted with a variety of policies reflecting different needs and interests. This is especially true if we think about green transitions, which are in the spotlight more than other issues. While many countries in the MENA region realize the imperative to change, every countryis at a different point in its journey. Across the region, solar, wind and nuclear energy pro- jects are already under way. Among Middle Eastern states, frontrunner countries such as

[39] Peoples and Vaughan-Williams, 'Environmental Security'; Trombetta, 'Environmental Security and Climate Change'.

[40] Deudney, *Environmental Security*.

[41] Eman Ragab, *An Alternative Approach to Regional Security in the Middle East*. The Cairo Review of Global Affairs (2020) www.thecairoreview.com/essays/an-alternative-approach-to-regional-security -in-the-middle-east/.

[42] Barry Buzan, and Ole Waever, *Regions and Powers: The Structure of International Security* (Cambridge: Cambridge University Press, 2003).

the United Arab Emirates and Saudi Arabia – whose economies are built on extracting and processing fossil fuels – are investing heavily in clean energy and committed to decarbonizing and diversifying their energy sectors not to lose their energy leadership status. In particular, they have clearly expressed their ambitions of becoming leaders in the hydrogen economy. This is a major change as Arab states have long been poorly represented at the Conference of the Parties (COP) summits, which is indicative of the lack of importance long accorded to issues of climate change by their decision-makers. In the two decades leading up to the 2015 Conference of the Parties in Paris (COP21), the Arab League mandated Saudi Arabia to represent it as the spearhead for the Arab group at the United Nations Framework Convention on Climate Change (UNFCCC), whereby Riyadh notoriously acted as a blocker in the negotiations for the Paris Agreement that arose out of COP21.

For example, taking the Intended Nationally Determined Contributions (INDCs) presented (or not) by countries in view of the COP21 as indicators of each country's level of commitment to climate change policies, varied goals and levels of engagement (and advancement) clearly emerge. The major oil-producing countries of the Gulf Cooperation Council (GCC), also the major polluters, were more 'hesitant' in delineating their mitigation and adaptation policies. Notably, their heads of states did not even attend the COP21 Summit, nor the signing ceremony of the Paris Agreement some months later in New York. Saudi Arabia and Qatar (which has the highest carbon footprint per capita) opted for conditional engagements having economic diversification and mitigation co-benefits at their core.[43]

In the Mediterranean basin, it is Morocco which seeks to leverage its geographic proximity to Europe to export green hydrogen. At the same time, it was the first Arab country to submit its INDC, whose proposal are rooted in national priorities and policies. The country has committed itself to achieving 52 per cent renewable energy by 2030, while by 2050 it expects 100 per cent of its energy consumption to be green. Although this risks sounding like an overly rosy prospectus, the Alaouite Kingdom has become a regional benchmark in this area, and it is currently Africa's leader regarding efforts to combat pressing climate change. Renewable energy has been high on Rabat's agenda since the 2000s. Evidence of its ambitious and successful policy is the fact that the country hosts the world's largest solar complex (the Noor power plant in Ouarzazate). It is important to note that the expansion of renewables has been strongly driven by outside demand, and it is very much a centralized process with the clear backing of the monarchy.[44] In line with its pivot towards Africa and commitment to 'South–South' cooperation, Morocco has increasingly boosted its soft power in the environmental sector, not unlike the religious sphere.[45] Moreover, its leadership role in environmental policies goes far beyond the regional dimension. In fact, Morocco takes one of the top places in the Climate Change Performance Index 2022 worldwide, right after Denmark, Sweden, Norway and the

[43] Rana El Hajj, 'How Serious Are Arab Countries about Climate Change? A New Era of Climate Change Policy', in *A Region Heating Up: Climate Change Activism in the Middle East and North Africa* (Beirut, Rabat, Ramallah, and Tunis: Heinrich Böll Stiftung, 2016), 2–5.

[44] The green energy transition and its ambitious targets are in fact managed by the semi-public Moroccan Agency for Sustainable Energy (AMED, *Agence marocaine pour l'énergie durable*) linked to the royal family and the publicly owned National Office of Electricity and Drinking Water (ONEE, *Office national de l'électricité et de l'eau potable*) which basically have a monopoly on the power grid.

[45] Salim Hmimnat, 'Morocco's Religious "Soft Power" in Africa', *Moroccan Institute for Policy Analysis*, 6 June 2018.

United Kingdom.[46] Remarkably, it hosted the Climate Change Summit in 2016 (COP22) right after the Paris Agreement. On the margins of COP22, King Mohammed VI convened the first Africa Action Summit and launched a number of transnational projects and commissions to explore innovative ways to address key climate challenges in the continent. In the Maghreb, whereas Morocco takes the lion's share of energy, traditional energy giant Algeria has recently embarked on ambitious energy diversification programmes. Tunisia has been slower to take up such work; this latter, however, should be highly interested in developing renewable energies given its dependency on natural gas imports. Moreover, Tunisia is the first country in the region to recognize climate change in its 2014 constitution,[47] guaranteeing the right to a healthy and balanced environment and the right to participate in the protection of the climate (see Article 45).[48] Moving East, countries such as Egypt, Lebanon and Jordan are working on green transitions. Egypt is much more focused on adaptation and building resilience than other countries, while Lebanon still lacks a national climate change strategy and has a scattered approach rooted in several sectoral policies.[49] Although it set ambitious goals, such as the unconditional target of a 15 per cent reduction in national greenhouse gas emissions by 2030, the key difficulty seems to be translating this into action. Aware of its high dependence on energy imports, Jordan was the first Arab country to specifically develop a national climate change policy in 2013.[50] Nevertheless, Jordan's INDC is considered not as ambitious as it could have been.

A key aspect of green transitions is, however, too often underestimated. Green transition is not just about decarbonization, investment in new technologies and facilities, but involves rethinking production structures and mindsets. It also has a strong equity and fairness dimension. In fact, a core yet still largely underexplored pillar of the *green* transition as a new developmental paradigm is that of *just* transition. It should be noted, for example, that *Leave no one behind* is one of the mottos of the EU Green Deal; this will have profound geopolitical repercussions in its neighbourhood, included some MENA countries. It follows that talking about green – hence just – transitions towards renewable energies and sustainable ways of production shall not be done, at least in theory, in isolation from socio-economic but also civil rights such as jobs, infrastructure development, wealth redistribution and the right to health. This also entails addressing specific local grievances, as well as questions of access to natural resources, resource governance and management, resource sovereignty and the renegotiation of social contracts. Instead, current state-led discourses about the environment in the MENA countries, and even more state-led 'environmental projects', seem overwhelmingly concerned with an approach of environmental security centred on either the dimension of national security or the security of the regime, which do not always meet the needs of environmentalism from below. Before illustrating how the interconnections between environmental issues, justice and governance play out on the ground, like a spider's web, it is worth considering what environmental issues are perceived by the grassroots, at least to the extent that they are captured by surveys.

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[46] See the CCPI (Climate Change Performance Index) Ranking 2022 available at: https://ccpi.org/ranking/. (Last accessed on 23 May 2022).
[47] Haykel Ben Mahfoudh, 'Tunisie', *Annuaire international de justice constitutionnelle* 35 (2019).
[48] The new 2022 constitution maintained the same provision at Article 47.
[49] El Hajj, 'How Serious Are Arab Countries about Climate Change?'
[50] Ibid.

MENA CITIZENS AND THE ENVIRONMENT

A 2017 public opinion survey carried out by the Arab Forum for Environment and Development (AFED) in all the 22 countries which are members in the League of Arab States revealed that a majority of approximately 61 per cent of respondents believes that the environment has deteriorated over the past ten years, reflecting findings of a similar AFED survey in 2006.[51] The remainder is almost equally divided in believing that the situation has remained the same or improved.[52] The latter, more positive outlook mainly concerns the United Arab Emirates, the only country where a majority of just over 50 per cent thought that the environment is being improved.

Despite an increase in environmental awareness,[53] it must be borne in mind that compared with other issues, environmental issues are still a secondary concern. Asked about the most important challenges their countries are facing today in Wave 4 of the Arab Barometer,[54] the vast majority of Arab citizens are concerned about the economic situation, including poverty, unemployment and price increases. This follows financial and administrative corruption.[55] At a glance, pollution and broader environmental concerns appear only in limited percentages as top priorities, and in a few countries in the same Wave.[56] For example, 0.4 per cent of those surveyed in Jordan mention the lack of natural resources, while in Morocco 2.5 per cent quote limited natural resources and 5.6 per cent natural disasters. In Tunisia, 1.7 per cent and 1.5 per cent complain about pollution and the need to take control of national natural resources, respectively. Lastly, only 0.3 per cent of Lebanese respondents are primarily concerned about environmental issues. Likewise, taking a look at Arab Barometer's Wave 5, answers about ranking the most pressing challenges do not include environmental issues. More recently, moreover, according to Arab Barometer's 2020–1 surveys, environmental protection does not arise as a public priority.[57] Instead, top priorities for government spending are the education and healthcare systems (unsurprisingly, perhaps, in the context of the Covid-19 pandemic).

The fact that the environment does not appear among the 'hot' dossiers, neither as a perceived threat or challenge nor as a priority that citizens would like to see addressed, does not imply neglect *tout court*.

Wave 5 of the Arab Barometer devoted a series of questions to the perceived seriousness of climate change, air quality, water pollution and trash.[58] Having been explicitly asked about them, it turns out that 70 per cent of Arab citizens considered water pollution to be the most

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[51] Najib Saab, 'Arab Public Opinion and the Environment', in *Arab Environment in Ten Years*, ed. Najib Saab, 2017.

[52] Ibid.

[53] Najib Sabb, 'Environmental Awareness in Arab Countries: A Survey', *EcoMENA*. February 20, 2021.

[54] Arab Barometer, 'Data Analysis Tool: Wave IV', 2016.

[55] However, please note that these issues are all proposed by the interviewer as possible answers. By contrast, 'environmental issues' are listed not among the assisted responses.

[56] The following percentages are derived from spontaneous responses to the questions 'What are the two most important challenges your country is facing today? (Other mentions)', and are filtered by Wave and by selecting all (available) countries.

[57] Arab Barometer. 'What MENA Citizens Think about the Environment in 11 Graphs'. Arab Barometer, March 24, 2022.

[58] Arab Barometer. *Environmental Issues in the Middle East and North Africa*. Arab Barometer – Wave V Topic Report. October 2019.

serious of environmental issues, followed by trash, identified as such by 66 per cent of the respondents.[59] In comparison, air quality and climate change are viewed as less important as around 44 per cent and 35 per cent of citizens are concerned about them. Notably, it is mainly Libya, Iraq and Tunisia that are worried about water pollution and waste, while Lebanon is the most alarmed about climate change.

 That said, some considerations are necessary.

 Although these surveys provide a very much needed overview of the main environmental challenges in the region, we currently have a partial view of the degree to which they are perceived as priorities compared to other issues. Data are partial for a number of reasons: first, because of the lack of time series; second, because the environment is not included in the assisted response basket of main challenges; and, third, as some countries are excluded from the Arab Barometer surveys – notably the GCC, for example. This does not mean, however, that there are no country-by-country studies conducted by other institutes, both local and international. In this case, however, a systematic comparison obviously becomes more problematic.

 In addition to the quantitative dimension, further qualitative studies could enrich our understanding of environmental issues, including environmental security. We could start with what citizens understand by 'environment'. For example, a 2017 report issued by the Heinrich-Böll Stiftung on the results of a survey on the environmental situation in Tunisia shows that citizens associate the environment mainly with rubbish (almost 56 per cent) in open-ended answers. Next comes pollution ('only' 6.4 per cent).[60] Likewise, when asked about how sensitive they are to the environment, almost 60 per cent of Tunisians answer they are 'very sensitive' to it, and 25 per cent 'quite sensitive'. However, in the list of priorities for the country, the environment ranks very low, at 0.6 per cent. At the same time, dissatisfaction with various public institutions in the management of the environment is very high. Although it is not possible to generalize from a single case, it is nevertheless interesting to ask to what extent there are similar 'contradictions' in other countries, in order to better understand the notion of 'environment' itself, the level of environmental risk awareness, how much the priorities of citizens differ from those of their rulers, and the extent and type of environmental activism locally.

WHAT SECURITY? EXPLORING PATTERNS OF ENVIRONMENTAL ACTIVISM

Following the 2010–11 Arab uprisings, environmental activism has been intensifying in the region.[61] As Arab publics demanded voice and representation, they took advantage of the political openings resulting from the so-called "Arab Spring" to organize at grassroots level for their environmental rights as well.[62] To be sure, environmental activism, especially focused on issues that affect public health and livelihoods, is by no means a new phenomenon. Yet, it has

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[59] Ibid.

[60] Heinrich-Böll Stiftung, *Résultats du sondage d'opinion sur la situation environnementale en Tunisie*. February 2017.

[61] Harry Verhoeven, ed., *Environmental Politics in the Middle East: Local Struggles, Global Connections* (Oxford and New York: Oxford University Press, 2018).

[62] Aziza Moneer, 'Environmental Activism in The Post-Arab Spring: It Is Not About a Mere Clean Environment,' in *Euromed Survey of Experts and Actors*, February 2020.

intensified in recent decades.[63] After all, a growing number of scholars have more explicitly addressed the linkages of environmental politics, social contestation and governance in the MENA region.[64]

Taking to the streets is but one form of manifestation of environmental activism, but it is certainly the most visible and far-reaching. However, defining a physiognomy of environmental-related protests is not an easy task, for a number of reasons.

First, they usually encompass a wide variety of 'environmental' issues, ranging from water stress, land degradation, pollution and waste to land dispossession and the overexploitation of mining and fishing resources, to mention just a few. More broadly, highly controversial is the access to the country's natural resources – be they the coastline or the subsoil, oases or urban green spaces – and their protection not only from climate change but also and above all from human action and from privatization. Here it is evident how different conceptions of environmental security unfold, with the environment being both a source of risk (such as environmental change) and the entity to be secured (such as its natural resources).

Second, they differ widely in their geographic outreach. They very often remain spatially confined episodes and refer to site-specific advocacy, sometimes rise to the level of national issues and also draw attention on a regional and international scale.

Third, they are also distinguished by their duration and intensity. Being so varied for the concerned issue-areas and scattered across countries, environmental activism in the shape of protests is not easy to map. Even less easy is disentangling it from a plurality of other pressing issues that are not primarily related to the environment, however ambiguous its definition remains. A fourth crucial aspect in 'typifying' environmental protests is, in fact, their intersectionality; more precisely, the ways in which environmental issues meet, or even clash, with the right to health, work, redistribution and social justice. In this line of reasoning, two additional aspects are worth noting. The way in which the environment overlaps with issues of marginalization and, entwined with problems of mismanagement and exploitation, reinforces claims against the system and the regime.

To put all these remarks into context, countless examples can be mentioned across the MENA region. Water stress is certainly among the most sensitive issues. Jordan is probably the best known case of structural crises related to water scarcity. Yet, national protests largely eschewed environmental claims which have instead remained geographically hyper-localized in some peripheral regions and rural communities.[65] Such a condition can be explained, some argue, due to the government's successful securitization discourse which blames the water problem on individual consumption habits and foreign forces such as Israel, thus preventing it from becoming a rallying factor for discontent and mobilization, at least on a national scale.[66]

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[63] Jeannie Sowers. 'Environmental Activism in the Middle East and North Africa'. In *Environmental Politics in the Middle East: Local Struggles, Global Connections*, ed. Harry Verhoeven (Oxford and New York: Oxford University Press, 2018).

[64] See, e.g., Nicholas Hopkins, ed., *Environmental Challenges in Egypt and the World* (Cairo: American University in Cairo Press, 1992). Jeannie Sowers, *Environmental Politics in Egypt: Activists, Experts, and the State* (London: Routledge, 2012). Sowers, 'Environmental Activism'.

[65] Taraf Abu Hamdan, 'Soil, Dirt, Earth: Deserts, Rural Communities, and Power in Jordan' in *Environmental Politics in the Middle East and North Africa*. POMEPS Studies 46, May 2022.

[66] Jérémie Langlois and Marwa Daoudy, 'Words, Water, and Waste: How Government Discourse Shapes Environmental Protest in Lebanon and Jordan'. In *Environmental Politics in the Middle East and North Africa*. POMEPS Studies 46, May 2022.

Comparing the Jordanian case with Lebanon, where, on the contrary, concerns around water, trash and disaster management led to large-scale mass mobilization in a broader critique of the government's legitimacy, this argument has good explanatory potential as it addresses the question of why, despite a similar set of environmental challenges, countries witness varying degrees of environmental mobilization. Also, it interestingly reminds us of the narrative 'construction' of a threat, and the process of securitizing or de-securitizing environmental issues. According to the constructivist school, threats, including environmental ones, are the result of discursive processes rather than objective facts. From this perspective, it can be argued that the Jordanian state, by leveraging its prevailing domestic and international security concerns, manages not to be held responsible for the water problem despite it being a feature of everyday life.

Broadly speaking, water scarcity has lent itself greatly to associations with security themes. In fact, the idea that countries might fight over shared waterways and water scarcity in the so-called 'water wars' is extremely popular among politicians, journalists, some academics and NGOs. This narrative particularly fits the securitizing move of environmental issues and the environment–conflict thesis discussed above, which often conflates risk factors or concur-rent factors with direct causal relationships. As Barnett and Dabelko recall, some authors have demonstrated that countries seem more likely to cooperate than fight over water, globally and including the Middle East.[67] Overstating water scarcity, furthermore, may obscure the respon-sibility of national and international actors such as state authorities, local elites and private corporations in mismanaging natural assets, thus precluding fair access. Far from denying that certain resources are at risk, the aim here is to emphasize human co-responsibility, sometimes unconscious, sometimes not. While arid and semi-arid climatic conditions may make the problem of water scarcity seem unsurprising in the MENA region, it is crucial to note that the point is not scarcity alone, but also mismanagement and precise political choices. A problem that becomes more acute, of course, with the hot season and rising temperatures. Such was the case with the July 2021 protests in Iran: the lack of rain and drought coupled with the building of hydro-electric dams and farming of water-intensive products such as rice, wheat and sugar cane sparked anger and protests among the local population in the south-western province of Khuzestan, inflamed by a heatwave with temperatures of up to 50C. Similarly, the 'thirst revolts' in Morocco erupted in the autumn of 2017 in Zagora, a city close to the desert, over chronic water shortages produced by the systematic exploitation of sparse resources for agriculture by big farmers to the detriment of local inhabitants, especially the cultivation of watermelons and other water-intensive productions destined for export. It is emblematic, fur-thermore, that even areas that are supposed to be rich in water, due to rainfall or the presence of springs, do not benefit from it and are instead experiencing rationing or systematic shortages, as evidenced by the 2016 summer-long protests throughout Tunisia starting from the Jendouba governorate which supplies water to the rest of the country. As Habib Ayeb's documentary *Om Layoun* (2021) denounces, this is partly due to regional disputes, whereby some regions get water at the expense of others, or sectoral disputes between industrial and agricultural sectors. Also, it may be the result of development policies pursued by the state which system-atically prioritize exports over small farmers, rural populations or ecology. In any case, poor redistribution and ad hoc planning take the lion's share in accounting for these deficiencies

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[67] Barnett and Dabelko, 'Environmental Security'.

and selective benefits rather than 'scarcity' per se. As with water, the same can be said of many other resources. In this sense, environmental issues directly speak to the broader matter of dysfunctional governance, evolving into claims of a broader political nature and calling into question the government's legitimacy. Suffice it to think here to the 2013 Gezi Park protests in Istanbul. Primarily started by environmentalists to protest against a shopping mall project on a small yet symbolic central urban park, they then turned into a countrywide resistance movement which challenged Erdoğan's authoritarian tendencies and the hyper-developmentalist environmental and urban policies of his government.[68] Notorious also is Beirut's 'You stink' campaign in 2015. Far from being confined to decrying the incapability of the administration to collect garbage in the capital and its surroundings, it evolved from the very beginning to a full-fledged national movement against political corruption and the sectarian system which allowed its proliferation.

While some bottom-up contentious protests 'upgraded' to the level of nationwide movements, others remained more circumscribed. However, they have equally and increasingly developed in an intersectional manner, if not more so at a smaller scale. For example, by bringing together environmental issues with labour claims and especially lack of job, underdevelopment, misrecognition and even neocolonialism, some also led to the gradual emergence of cross-class and cross-ideological convergences. Interesting is the mobilization of the 'Popular Committee Against Shale Gas' which arose in Algeria's Saharan town of Ouargla in 2014 and 2015 as a telling case of coalition building between a movement of unemployed and environmental activists against governmental fracking plans. Although the coalition finally split up, it brought together horizontal networks of middle-class citizens concerned about the occurrence of an ecological disaster and unemployed and precarious workers calling for their recruitment into public oil companies. Albeit so different, for a while they put aside their diverging long-term interests to voice their sense of relative deprivation and marginalization and denounce regional disparities.[69] Indeed, the anti-fracking issue became a unifying cause, and very political insofar as 'it posed the question of citizen's inclusion in decision making processes, national sovereignty and the crisis of corrupt and authoritarian governance'.[70] This is far from an isolated case in the region. While each has its own specific breadth, duration, intensity and demands, relevant to different circumstances, many local contestations and fights all represent the struggle of marginalized communities for inclusion and recognition through an accumulation of grievances. In areas marked by a legacy of neglect if not a past of repression by both colonial and post-colonial authorities, protesting against a deliberate politics of 'exclusion' by the state is the common thread. Mobilizations such as the *Hirak* ('movement') of the Rif and Jerada in Morocco are also exemplary of this dynamic. In the northern Rif region, whose inhabitants, mostly ethnic Berbers, have long defied the monarchy, as well as the colonial powers before it, demonstrations were sparked at the end of October 2016 in the town of Al-Hoceima over the death of Mouchine Fikri, a 31-year-old fishmonger who was crushed to death in the trash compactor he had jumped into in order to retrieve his merchandise, which the police had previously confiscated. Taking the lead from the mobilization against official

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[68] Ayşem Mert, 'The Trees in Gezi Park: Environmental Policy as the Focus of Democratic Protests', *Journal of Environmental Policy and Planning* 21 (2019).

[69] Naoual Belakhdar, 'When Unemployment Meets Environment. The Case of the Anti-Fracking Coalition in Ouargla', *Mediterranean Politics* 24 (2019).

[70] Ibid., 437.

abuses and humiliation, the *Hirak* articulated demands concerning social service provision and economic issues. Among other key demands beyond redistribution, however, stand the end to the region's militarization in place since a *dahir* (royal decree) of 1958, and the recognition of a 'disaster area' status, given also its seismic nature.[71] In addition to that, the development of infrastructures to re-integrate the area (with better roads and railway), a university and a specialized hospital for cancer, as the region still suffers from the consequences of harmful gas used to suppress past rebellion; the restructuring of the fishing and agricultural sector and tourism facilities, and more broadly, public investment.[72] Triggered by an equally dramatic and contingent event imbued with a shared narrative of social exclusion, local population in the eastern mining town of Jerada rose up against the lack of decent employment after two young brothers, Houcine and Jedouane Dioui, died in a clandestine coal mine in December 2017. In the absence of viable economic alternatives, the 'mines of death' – infamous for theirunsafe and risky conditions – are the only opportunity for many people to make ends meet.

Still in Morocco, the flagship Maghrebi country of green transitions, symptomatic is the emergence of 'environmental' protests against major state-led development projects precisely because of redistribution concerns. The Noor Project, the largest solar plant worldwide, significantly undermined the access to water of local communities. By doing so, this kind of project may be in direct conflict with the local interests on the ground, thus reinforcing pre-existing disconnect and conflicts between the state and local communities.[73]

CONCLUSION

From Tangiers to Tehran, social contestation linked to environmental issues has often intersected with a plurality of issues, including social justice, labour, health, marginalization and new forms of neo-colonialism that challenge the legitimacy of regimes. In this dense web of claims, old and new, extrapolating exclusively environmental issues is misleading if not unhelpful in making sense of what is happening on the ground – especially since, while Arab citizens show varying degrees of interest and concern about the environment, it cannot be forgotten that it is other challenges, economic ones *in primis*, that are of greater concern. On the other hand, the regimes' interest in the environment, where present, manifests itself mainly in terms of green transitions and highly centralized and often hetero-directed development projects, which struggle to find immediate positive spillovers on local communities where they do not directly conflict. In this sense, the environment becomes in its own right an arenafor renegotiation, of rights and social contracts. Above all, it becomes an emblematic casefor problematizing notions of security (security for whom? security from what?). As few other areas, when it comes to environmental security, the environment, individuals and states,

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January 2017. [71]   Sawt Chaabe, 'وثيقة مطالب الحراك الشعبي بإقليم الحسيمة[Demands of the Popular Movement in the Region of Al Hoceima]'. جريدة صوت الشعب [*The Voice of the People*]. 15

[72]   Ibid.

[73]   Sylvia I. Bergh and Daniele Rossi Doria, 'Plus Ça Change? Observing the Dynamics of Morocco's 'Arab Spring' in the High Atlas', *Mediterranean Politics* 20 (2015). Koenraad Bogaert, 'Paradigms Lost in Morocco: How Urban Mega-Projects Should Disturb Our Understanding of Arab Politics', *Jadaliyya*, 4 June 2015. www.jadaliyya.com/Details/32156. Habib Ayeb and Ray Bush, *Food Insecurity and Revolution in the Middle East and North Africa. Agrarian Questions in Egypt and Tunisia* (London: Anthem Press, 2019).

among others, can be both security threats and entities to be secured. Somehow, securitizing the environment has increased its relevance. Yet, many contradictions remain and a more systematic analysis of environmental issues in the area is needed, especially in comparative terms.

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